

Title (en)

BAR CODE SCANNER WITH A LARGE DEPTH OF FIELD

Title (de)

STRICHCODELESER MIT GROSSER TIEFENSCHÄRFE

Title (fr)

LECTEUR DE CODE A BARRES A GRANDE PROFONDEUR DE CHAMP

Publication

EP 0516837 B1 19970305 (EN)

Application

EP 92903998 A 19911219

Priority

- US 9109522 W 19911219
- US 63463890 A 19901227

Abstract (en)

[origin: WO9212499A1] A bar code scanner (10) having a lens (14), a reflector (16), a sensor (18), and a detection unit (22). The lens is arranged to focus an image of a bar code to be scanned along an image path. The reflector is angled obliquely to the image path so as to reflect images at an angle to the image path. The reflector has a reflector surface shaped so as to provide a plurality of reflected images of the scanned bar code, with one of the reflected images being an in-focus image and a remainder of the reflected images being out-of-focus images. The sensor is in the image path and simultaneously senses the plurality of reflected images and provides a sensor output signal corresponding to the sensed images. The detection unit is coupled to the sensor and decodes the sensor output signal and provides a bar code output signal that corresponds to the scanned bar code.

IPC 1-7

G06K 7/10

IPC 8 full level

G06K 7/10 (2006.01)

CPC (source: EP US)

G06K 7/10811 (2013.01 - EP US); **G06K 7/10831** (2013.01 - EP US); **G06K 2207/1013** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

WO 9212499 A1 19920723; DE 69124996 D1 19970410; DE 69124996 T2 19970911; EP 0516837 A1 19921209; EP 0516837 B1 19970305; JP H05505269 A 19930805; US 5198648 A 19930330

DOCDB simple family (application)

US 9109522 W 19911219; DE 69124996 T 19911219; EP 92903998 A 19911219; JP 50434792 A 19911219; US 63463890 A 19901227